

**REMARKS**

The Examiner is thanked for withdrawing the previously applied rejections on 35 U.S.C. 112, second paragraph, and the prior art rejections on Van Antwerp, et al. and Yasuda, et al. Pursuant to the newly applied rejections on Coleman, et al., Claims 16-19 have been cancelled and Claims 14, 15, 26, and 27 have been amended to more definitely set forth the invention and obviate the rejection. Support for the amendment of Claim 14 can be found in the Specification on page 13, lines 1-4, and page 12, lines 10-12. Support for the amendment of Claim 15 can be found in the Specification on page 8, last two lines and page 9, line 1, and page 10, lines 6-12, Fig. 4, and page 12, lines 5-10. In addition, new Claims 28-41 are presented. Support for the new Claims 28-41 can be found in original Claims 18 and 20-25.

Further, the Specification has been extensively amended to delete reference to specific claims and replace the recitation with "The disclosure teaches---" as suggested by the Examiner. Also, the Abstract has been rewritten so as to be directed to the apparatus now called for in the claims herein. The present amendment is deemed not to introduce new matter. Claims 14, 15, and 20-41 are in the application.

Reconsideration is respectfully requested of the rejection of Claims 14-15, 18, 22 and 26 under 35 U.S.C. 103(a) as being unpatentable over Coleman, et al.

At the outset, Applicant wishes to point out that attached is a certified, ribboned true copy of the Japanese priority document JP 2002-314333, filed October 29, 2002, upon which Applicant has claimed priority under Title 35, United States Code, paragraph 119 in the Declaration and Power of Attorney filed with this application. Please note that an English translation of Japanese

Application 2002-314333 is also attached to the ribboned and sealed priority document. Further, we are enclosing herewith an explanation of the Recognition – additional information which is a part of the priority document.

This priority document establishes that with the filing of the Japanese priority document and English translation thereof Applicant has now presented objective evidence showing that the effective filing date of the present application is the Japanese priority date of October 29, 2002. This date is earlier than the publication date of October 31, 2002 of the Coleman, et al. reference, Publication No. US 2002/0160367A1. Therefore, the Coleman, et al. reference is not prior art against the present application.

In any event, the Coleman, et al. reference describes a structure which is quite different from the present invention as seen from the Abstract. The Coleman, et al. certainly describes that molecules are transferred and affixed to a laminate, and the laminate is heated to be changed in property. However, this change is referring to shrinking of the shrinkable polymeric film 12 in Fig. 1A.

In contrast, in the present invention a thin film formed on the surface of a substrate is heated at a desired region to be changed in property, but differently from Coleman, et al. In the present invention the change in property means vaporization. The energy involved in the vaporization is used to fly or shoot the base sequence analysis sample immobilized on a thin film, and the vaporized sample is transferred to and captured on the surface of a second substrate. It is therefore clear that the present invention is fundamentally different from the processes and films disclosed in Coleman, et al.

The Examiner has apparently recognized the fundamental difference between the present invention and the disclosure of Coleman, et al. in noting that there is no disclosure in Coleman, et al. of a second substrate.

Moreover, there is no disclosure in Coleman, et al. of an apparatus for analyzing a base sequence which utilizes a first board having a front surface, a thin polymeric gel film thereon and a heating means disposed in the first board for heating and vaporizing the thin polymeric gel film and a second board disposed opposite a surface of the polymeric gel film, whereby the thin polymeric gel film is heated and vaporized to shoot a DNA fragment from the first board to a surface of the second board as now called for in Claim 14.

Additionally, there is no disclosure in Coleman, et al. of an apparatus for analyzing a base sequence having a first board formed of a light transmitting material allowing transmission of a laser beam or an ablation layer formed on a front surface of the first board as now called for in Claim 15. Further, there is no disclosure in Coleman, et al. of an apparatus for analyzing a base sequence which includes heating with laser beam irradiation a back surface of a first board, whereby a heated region of an ablation layer is heated and vaporized to shoot a DNA fragment together with a corresponding fragment of the thin polymeric gel film from the first board to a front surface of a second board as now called for in Claim 15.

Amended independent Claims 14 and 15 now call for numerous elements which are nowhere found in the Coleman, et al. reference, and there is no teaching or suggestion in Coleman, et al. that any of these additional elements could be used with the film of Coleman, et al. For these reasons, it is respectfully urged that the claims now in the application clearly and unquestionably

patentably distinguish from Coleman, et al. Consequently, the Examiner would be justified in no longer maintaining this rejection. Withdrawal of the rejection is accordingly respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance, and early action and allowance thereof is accordingly respectfully requested. In the event there is any reason why the application cannot be allowed at the present time, it is respectfully requested that the Examiner contact the undersigned at the number listed below to resolve any problems.

Respectfully submitted,

TOWNSEND & BANTA

A handwritten signature in black ink, appearing to read "Donald E. Townsend", is written over a horizontal line.

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Date: March 15, 2007

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### CERTIFICATE OF MAILING

I hereby certify that this Amendment and Japanese Priority Document 2002-314333, in Docket No. MIT-044-USA-P, Serial No. 10/691,560, filed October 24, 2003, is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on March 15, 2007.

Donald E. Townsend